

V-RAM VGA

VIDEO SEVEN BRINGS THE POWER AND SPEED OF VRAM TO THE PC USER WITH THE MOST ADVANCED VGA DISPLAY ADAPTER EVER.

V-RAM VGA represents the ultimate in VGA performance. It's the only graphics adapter to combine 100% VGA hardware compatibility with the superior performance of VRAM technology. It means higher resolution. More on-screen colors. And incredible speed. Because V-RAM VGA, and our exclusive FastWrite™ feature, reduce wait states to virtually zero.

DISCOVER THE POWER OF VRAM

Standard graphics boards have used Dynamic Random Access Memory (DRAM), a technology originally developed for system memory. The V-RAM VGA board utilizes Video Random Access Memory (VRAM), developed specifically to meet the high-speed requirements of high-resolution video applications. VRAM eliminates the wait states caused by DRAM chips that are slower than the processors in high-performance systems.

Until recently, VRAM was available only for very specialized graphics boards. But by developing a new chip—the V7VGA™—Video Seven was able to design a board that delivers VRAM performance and speed to business graphics applications. With V-RAM VGA, graphics applications run with the response you've come to expect from text-based applications.

REDUCED WAIT STATES, INCREASED PERFORMANCE

V-RAM VGA is designed to be the fastest possible VGA board. There's no waiting. That's because the V7VGA chip supports a 16-bit interface, thereby eliminating the 8-bit bus emulation wait states. Our exclusive FastWrite feature speeds things up by allowing your computer to continue processing while data is being transferred to your screen.

Video Seven also designed in features to offer improved performance with software programs like Microsoft Windows. Our hardware graphics cursor eliminates flicker in environments which use pointers and decreases the time required to save and restore the area of bit-map covered by the pointer.

And V-RAM VGA features high speed data paths that allow programs to put more information on the screen with fewer accesses to memory. Software developers will appreciate the faster performance of programs they're designing.

WE GUARANTEE COMPATIBILITY

V-RAM VGA is 100% hardware compatible with the IBM PS/2 Display Adapter.™ It even offers the high-bandwidth monochrome mode and other VGA registers not documented by IBM. V-RAM VGA is also form-factor compatible. It has the same daughter card connectors as the IBM Display Adapter to ensure future compatibility.

V-RAM VGA will run all VGA software guaranteed. And, like all Video Seven graphics adapters, is backwards compatible with EGA, CGA, MDA and Hercules programs.

CLEARER, MORE COLORFUL GRAPHICS

Designed to operate at dot clock rates up to 65 MHz, V-RAM VGA supports both monochrome and color high-resolution graphics and text modes on displays such as IBM's PS/2™ analog monitors, NEC's MultiSync™ and Sony's MultiScan™ monitors.

V-RAM VGA supports much higher resolutions, with more simultaneous colors than standard VGA. From a palette of 262,144 colors, on-screen color choices and resolutions include:

On-board memory	Colors	Resolution
256K VRAM	4	1024×768
(standard)	16	800×600
	256	640×400
512K VRAM	16	1024×768
(optional	256	800×600
256K VRAM)	256	720×540
	256	640×480

High-resolution drivers for Windows/386, Windows, AutoCAD, AutoShade, GEM, Ventura Publisher and Presentation Manager are included to take full advantage of V-RAM VGA's performance. And 132 x 43 text drivers for Lotus 1-2-3, Symphony, WordPerfect and WordStar offer increased productivity to spreadsheet and word processing users.

SYSTEM REQUIREMENTS AND DIMENSIONS

V-RAM VGA runs in all IBM PC/XT/ATs and compatibles and the IBM PS/2 Model 30 and fits in both 16 and 8-bit bus slots.

V-RAM VGA measures $13.2^{\prime\prime} \times 3.2^{\prime\prime}$ and matches the form factor of the IBM PS/2 Display Adapter.

Connectors: 15 pin, keyed PS/2 compatible analog video. Two 44-pin rows and a feature connector are included to insure future compatibility with the IBM PS/2 Display Adapter.

5 YEAR WARRANTY

V-RAM VGA is guaranteed to be free of defects in material and workmanship for a period of five years from the date of purchase.

TEXT MODES

Colors	Character Cell
16	8x8
16	8x14
16	8x8
16	8x8
16	8x8
16	9x16
	16 16 16 16

GRAPHICS MODES

V-RAM VGA Extended modes:

		Display	VRAM
Resolution	Colors	Required	Required
1024×768.	16	 HVF	512K
1024×768.	4	 HVF	256K
1024×768.	2	 HVF	256K
800×600.	16	 VF	256K
800×600.	256	 VF	512K
720×540.	16	 VF	256K
720×540.	256	 VF	512K
640×480.	256	 VF,AD	512K
640×400.	256	 VF,AD	256K

Standard modes (including, but not limited to):

640×4802	 VF,AD2	56K
640 x 480 16	 VF,AD2	56K
640 x 350 16	 VF,AD2	56K
640 x 200 16	 VF,AD2	56K
320 x 200 16	 VF,AD2	56K
320×200256	 VF,AD2	56K
720x3482	 VF,AD2	56K

HVF = High Resolution Variable Frequency Monitor (e.g. MultiSync Plus, MultiSync XL) VF = Variable Frequency Monitor (e.g. MultiSync, MultiScan)

AD = Fixed Frequency Analog Monitor (e.g. IBM 8513, Zenith ZCM-1490)



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Some restrictions apply to Video Seven warranty and compatibility guarantee. Contact Video Seven for complete details. Variable frequency analog monitor (e.g. MultiSync) is needed for high resolution graphics. The following are registered and unregistered trademarks of the companies listed: AutoCAD, AutoShade, Autodesk Inc.; GEM, Digital Research Inc.; Hercules Computer Technology, Inc.; IBM, PS/2, Display Adapter, PS/2 Model 30, CGA, MDA, Presentation Manager, International Business Machines Corporation; Lotus 1-2-3, Symphony, Lotus Development Corporation; WordStar, MicroPro International; Microsoft Windows, Windows/386, Microsoft Corporation; NEC Multisync, NEC Home Electronics (USA); Multiscan, Sony Corporation; Video Seven, V-RAM VGA, V7VGA, FastWrite, Video Seven Inc.; WordPerfect, WordPerfect Corporation; Ventura Publisher, Xerox Corporation.